ABSTRACT

The present invention relates to a process for producing sulfide glass or sulfide glass ceramic each capable of conducting a lithium ion, comprising subjecting metallic lithium, sulfur as a simple substance and phosphorus as a simple substance as starting raw materials, which constitute the sulfide glass and sulfide glass ceramic, to mechanical milling to thereby convert them into sulfide glass or sulfide glass ceramic; and a whole solid type cell using the above-mentioned sulfide glass ceramic as a solid electrolyte.

According to the present invention, it is made possible to produce sulfide glass and sulfide glass ceramic which are each capable of conducting a lithium ion and which have high electroconductivity at room temperature by a simple and advantageous process from starting raw materials being easily available and inexpensive.